



Capital Branch



Central Valley Branch



Feather River Branch



Shasta Branch

September 2010

The Engineerogram

Volume 72, No. 09

President's Message

Building and Transitioning for Tomorrow

by Larry J. Smith, PE, F.ASCE, President



September marks the end of my term as ASCE Sacramento Section President. This message continues where I began by thanking all of the outstanding 2009-2010 Officers of our Section, Branches, Institutes, YMF and Student Chapters for their outstanding leadership and service. I'm grateful to all members who took time to cast ballots for our next slate of officers.

Over the past year, our officers stayed on course with the four strategic focus areas I reported on monthly in this column. As a public sector engineer practicing construction management and contract administration, I cite specifications and standards written by many professional societies. In taking a moment to

reflect upon the work of others, I've gained a greater appreciation and realization of how we rely on the professional research of professional societies for our successful execution of Civil Engineering Projects. My personal reflection of the past year is one of gratitude to the men and women serving ASCE at the Society and local levels. On September 9, 2010, I invite you to attend the Section and Branch Officer Installation and Awards Dinner at the Holiday Inn Capitol Plaza. Please stay engaged and connected to ASCE by attending any of the many opportunities within the Sacramento Section. Check the calendar on our website at www.asce-sacto.org for information on all of our upcoming events and opportunities for networking.

Building and Enhancing Careers: Over the past year, members enhanced their careers by taking on a leadership role. A simple committee assignment or serving as chair of a major event gave new opportunities to meet other professionals and to experience a very rewarding sense of accomplishment. I'm very pleased to have witnessed the growth and development of those who stepped forward.

Recognition: The Sacramento Section honored Students, Outstanding Projects and Outstanding Civil Engineers with Honors and Awards. Congratulations to all award winners and members working on award winning teams. Many members were honored as Society Award Winners and several of our Section's Outstanding Engineers were elected to Fellow Grade in our Society. This kind of recognition is a true reflection on every member of our Section.

Outreaching to Young Members: One of our strongest focus areas this year was reaching out to young members. Our student chapters won national recognition. New members are truly seeing the value of belonging to ASCE. Our Section and Construction Institute Scholarships afforded students some relief from an ever increasing cost of education. Many student members have become associate members and they are stepping into local leadership roles. The future of our Section and Branches is in good hands.

Vision: Oscar Serrano is our new Section President. Oscar brings a fresh vision for ASCE and the Sacramento Section. Oscar will be assisted by a great team of leaders continuing or joining our Board of Directors. I am counting on each of you to give Oscar your full support.

Thank you for your outstanding support. It truly has been my pleasure to serve.

Please communicate your ideas to the Board of Directors. Please send your comments or ideas to: sacramentosectiongsd@ermail.asce.org.

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The Engineerogram
P.O. Box 1492
Lincoln, CA 95648-1441
(916) 961-2723 (phone and fax)
e-mail: asce@asce-sacto.org
Web site: www.asce-sacto.org

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OFFICER CONTACTS

| Section Officers at Large | Capital Branch Officers | Central Valley Branch Officers | Feather River Branch Officers | Shasta Branch Officers |
|--|--|--|---|---|
| President: Larry J. Smith, PE, F.ASCE 916-261-1545 lsmith@calweb.com | President: Jennifer Wheelis jennifer.j.wheelis@usace.army.mil 916-616-5987 | President: Jasmine Noriega 209-406-8982 jasmine_noriega@dot.ca.gov | President: Shane Cummings 530-894-2487 sdcummings@handk.net | President: |
| President-Elect: Oscar Serrano, P.E. 530-458-8231 oserrano@colusa-nsn.gov | President-Elect: Thor Larsen, PE 916-973-0356 thor.larsen@edcgov.us | Vice-President: Tony Mazzei 209-234-0518 amazzei@condorearth.com | Vice-President: Amie McAllister 530-879-6911 amie.steel@gmail.com | Secretary: Susan Goodwin sgoodwin@vestra.com |
| Senior Director: Melissa Woodruff (916) 548-9859 melissascolaro@yahoo.com | Vice-President: Dan Clark, P.E. 530-887-1345 danc52@sbcglobal.net | Secretary: Kevin Seeman 209-992-6875 kseeman@contech-cpi.com | Secretary: Tammie Watkins 530-893-4640 tammie.watkins@gmail.com | Treasurer: Dale Roper droper@shn-engr.com |
| Junior Director: Greg Young, P.E. 916-368-9181 gregy@quincyeng.com | Secretary: Mario Carreon, P.E. Mario.carreon@att.net | Treasurer: Jason Tokheim 209-946-0268 jtaker@hotmail.com | Treasurer: Radley Ott rott@townofparadise.com | Past-President: Catherine Low catherine.low@ch2m.com |
| Secretary: Natalie E. Calderone, P.E., M.ASCE 916-414-1561 natalie.calderone@aecom.com | Treasurer: Richard Weitzenberg 916-849-1666 weitz@calis.com | Past-President: Benjamin Crawford 209-522-6273 benc@blackburnconsulting.com | Past-President, 2006-2007: Shane Cummings 530-894-2487 sdcummings@handk.net | |
| Treasurer: Jeremy J. Zorne, PE, GE, M.ASCE 916-852-9118 zorne@geoconinc.com | Past-President: David A. Wilson, P.E., M.ASCE 916-221-1094 dwilson520@sbcglobal.net | Younger Member Forum Officers | Standing Committee Chairs | Universities |
| Past President, 2008-2009: Fareed Pittalwala, PE 916-928-1113 fpittalwala@rbf.com | Institute Chairs | President: Kevin M. Gilton, PE 916-858-2419 giltonkm@bv.com | College Accreditation: Joan Al-Kazily, Ph.D, PE, M.ASCE 530-756-9530 jalkazily@sbcglobal.net | California State University, Chico |
| YMF Board Representative Kimberly Schmidt Brown 916-476-6790 Kimberly.Brown@hdrinc.com | Coasts, Oceans, Ports & Rivers Institute Zia Zafir, PE 916-366-1701 zzafir@kleinfelder.com | Central Valley President: Eng-Chong Voon 209-234-0518 Eng-Chong.Voon@LANEngineering.com | Disaster Preparedness: Howard Zabel, PE 530-622-7493 hzabell@ccmyersinc.com | California State University, Sacramento Jesse Ogren, President president@sacstateasce.org |
| Past President, 2005-2006; Exec. Director: Joyce Copelan, PE, MS 530-908-8372 jcopelan95694@yahoo.com | Construction Institute Larry J. Smith, PE, F.ASCE 916-985-4308 x 141 larry.j.smith@usace.army.mil | Region 9 Officers (California) | Education & Awards: Thor Larsen, PE 916-973-0356 thor.larsen@edcgov.us | CSU, Sacramento Joshua A. Wagner & Jesse Wallin Practitioner Advisors (PA) Joshua.A.Wagner@usace.army.mil WallinJW@bv.com |
| Executive Secretary Vivian Mevorah 916-961-2723 asce@asce-sacto.org | Environmental & Water Resources Institute : Pal Hegeudus, PE, D.WRE 916-928-5177 phegeudus@rbf.com | Chair: Chuck Spinks chuck.spinks@kimley-horn.com 916-797-3811 | Government Relations: Craig Copelan, PE 530-908-4790, ccopelan95694@yahoo.com | Univeristy of California, Davis Greg Young Practitioner Advisor (PA) gregy@quincyeng.com |
| Engineerogram Editor Vivian Mevorah 916-961-2723 asce@asce-sacto.org | Geo-Institute Kristy O'Hara 916-375-8706 kristyo@blackburnconsulting.com | Governor: Joan Al-Kazily, PhD, PE 530-756-9530 jalkazily@sbcglobal.net | History & Heritage: Norman Root 916-483-8669 norman_root@yahoo.com | |

| LEGEND |
|---|
| Section Voting Officers |
| Additional Section Staff |
| Region 9 Officers |
| Branch Officers who are not Section Voting Officers |
| YMF Officers |
| Committee Chairs |
| Universities |
| Conference Chairs |
| Institutes |

| |
|---|
| Structural Engineering Institute Joyce Copelan, PE, MS 530-908-8372 jcopelan95694@yahoo.com |
| Transportation & Development Institute Nader Tamannaie 916-448-1980 ntamannaie@califstructure.com |

For more ASCE activities if you wish to be active in a committee, career opportunities, complete text for the legislative activities, go to the Sacramento Section web site at www.asce-sacto.org, or contact a current officer. To MAKE CHANGES OR RENEW YOUR MEMBERSHIP, go to website: www.asce.org. For MEMBERSHIP APPLICATIONS, please e-mail to memapp@asce.org.

| |
|--|
| Membership-Life Members: Ray Zelinski, PE rczelinski@sbcglobal.net |
| Webmaster: Nicole Morrow 415-846-2163 Nicole.Marie.morrow@gmail.com |
| Scholarship: Eric Polson, PE 916-801-6290 polsonengineering@earthlink.net |
| Sustainability Robert Rescoe |

MASTER CALENDAR

| Date(s) (Times) | Event | Location | Information |
|----------------------------------|---|--|---|
| 2010 | | | |
| September | | | |
| Wednesday, 1st 5:30 pm | YMF Social | Scandia Family Fun Center, 5070 Hillsdale Blvd., Sacramento | www.sacymf.org |
| Contact Jasmine Noriega for info | Central Valley Branch Meeting, Page 5 | Marie Calendar's, 2628 W. March Lane, Stockton | Jasmine Noriega, jasmine_noriega@dot.ca.gov , 209-406-8982 |
| Contact Shasta Branch for info | Shasta Branch, Page 5 | | Shasta_asca@yahoo.com |
| Contact Shane Cummings | Feather River Branch Meeting, Page 5 | | Shane Cummings, 530-894-2487 sdcumings@handk.net |
| Wednesday, 8th 6:00 pm | Engineers Without Borders Meeting | TBD | Mark Quito, 916-567-2500, quito@pbworld.com |
| Thursday, 9th 6:00 pm | 2010 Sacramento Section ASCE Awards | Holiday Inn, Sacramento | www.asce-sacto.org |
| Tuesday, 13th | Sacramento Section Board Meeting | TBD | Natalie Calderone, 916-414-1561, natalie.calderone@aecom.com |
| Tuesday, 21st | Open Channel, Pressure Flow, and Culvert Hydraulics Class | TBD | www.darengineering.com More information: info@darengineering.com Andrew J. Ranzieri, P.E. at (916) 786-4829. |
| Tuesday, 28th | Capital Branch Meeting, Page 5 | Sofia Restaurant, 815 - 11th St (the corner of 11th and H Street). | Jennifer Wheelis, 916-616-5987 jennifer.l.wheelis@usace.army.mil |
| October | | | |
| 2nd | Rebuilding Dreams Workday | Sacramento | Rebuilding Together Sacramento, 916-455-1880 http://tinyurl.com/27ufe4e |
| 6th 5:30 pm | YMF Quarterly Business Meeting | Jacobs Engineering Group, 180 Promenade Circle, Sacramento | www.sacymf.org |
| 21st - 23rd | ASCE 140th Annual Civil Engineering Conference and Hoover Dam Symp. | Bally's Hotel and Casino Las Vegas | Leikny Johnson, 703-295-6413 ljohnson@asce.org |
| December | | | |
| 9th - 10th | Pipe Selection for Municipal Facilities | Doubletree Hotel, 2001 Point West Way, Sacramento | 1-800-548-2723, www.asce.org/conted/seminars |
| 2011 February | | | |
| Tuesday, 15th | Sacramento Chapter of EWRI Hosting the Second Annual Symposium | Hyatt Regency, Downtown Sacramento | |
| Conferences | Section Officer Meetings | Seminars | YMF Events |
| Section Meetings | Branch Meetings | Outreach Events | Student Events |
| Region 9 Events | | | |

The Sacramento Section Elects New Board of Directors

by Fareed Pittalwala, P.E., Past President
Chair, Elections Committee

The Sacramento Section Elections Committee is pleased to announce the results of our officer elections and the new 2010-2011 Board of Directors.

- President: Oscar Serrano**
- President-Elect: Jon Balzer**
- Executive Director: Greg Zeiss**
- Senior Director: Greg Young**
- Junior Director: Kimberly Brown**
- Treasurer: Joshua Wagner**
- Secretary: Mark Quito**

We had a record turn-out for elections this year, and I would like to personally thank each of you who submitted a vote. The new Board of Directors is here to serve the civil engineering profession and each of you, as members of the Sacramento Section. I encourage you to contact any of the Board members with your thoughts and ideas regarding the direction of ASCE or any activities or initiatives you would like seen moved forward, and volunteer to serve as a committee chairperson on the Board. It has been my pleasure serving the Board these past 3 years, and I wish the new Board of Directors all the best as they take on the responsibility of managing the nearly 7,000 professional civil engineers in the Sacramento Section.

ASCE[®]

Sacramento Section

Younger Member Forum

September 2010



YMF FALL 2010 PE EXAM REVIEW COURSES

Planning on taking the PE exam? It's not too late to register for the YMF Fall 2010 PE Exam Review Course and let the experienced instructors lead the way! The Sacramento Chapter of the ASCE Younger Member Forum is offering improved review courses for the following exams:

1. Engineering Surveying
2. Seismic Principles

Sorry, classes for the General / 8-Hour exam started August 4. October's not that far away, so register now. It's easy; just visit our website at <http://www.sacymf.org/pe-review> to register online. Class schedules, locations, and prices are located on the website too. Remember, early registration discounts are still available for the Seismic Principles review segment!

SEPTEMBER SOCIAL!

Join us at our next social! On Wednesday, September 1, 2010, at 5:30 pm, the YMF group will meet at Streets of London, 1804 J Street, Sacramento, 95814 (J Street between 18th and 19th). This is a perfect opportunity for you to come out and enjoy a beautiful Sacramento evening downtown, socialize and network with fellow YMF members, and just relax as we kick off a new month! Join us at this popular downtown hangout. YMF has reserved some space at the pub and will even pick up the tab for the first round of drinks! Contact Elias Karam, elias.karam@jacobs.com, for more information!

ELECTIONS

Don't forget! We will be holding officer and committee chair elections for the upcoming year in YMF at October's Business Meeting. If you or someone you know would like to be part of the YMF Officers or Chair groups, please let our current president, Kevin Gilton, or secretary, Elizabeth Weeks know (email them at giltonkm@bv.com or eweeks@markthomas.com). Join the fun ~ being an officer or committee chair is the best way to be more involved with YMF, as well as to get to know your fellow younger engineers. This year, we even added a couple of new committees! Sorry, positions of Executive Director and President are not eligible for nominations and voting.

DID YOU KNOW...

ASCE has updated the national logo, and we're following suit! The changes include a lighter blue and Univers Condensed

font for the main logo. Look for this logo in future ASCE YMF correspondence!

MIXER FUN!

YMF held a mixer on Thursday, August 5, 2010, 5:30 pm at the area's finest – Zinfandel Grille! Rachel Radell, Energy Specialist for the city of Roseville and YMF Government Affairs Chair, presented her take on Engineering's role in government affairs to a larger than anticipated crowd! Our elected and appointed officials make decisions every day that affect the civil engineering profession. As engineers, we have a unique policy perspective that can protect the interests of civil engineers at the local, state, and federal levels of government and society as a whole. ASCE is a strong advocate for civil engineering and infrastructure, but it is the relationships that its members have with their elected officials that have the largest impacts on public policy. Look for more from Rachel on this important and world-wide impacting topic!



UPCOMING EVENTS

- * YMF Social, Wednesday, September 1, 5:30 PM, The Streets of London Pub, 1804 "J" Street, Sacramento, CA
- * Quarterly Business Meeting, Wednesday, October 6, 5:30 PM, Jacobs Engineering Group, 180 Promenade Circle, Sacramento, CA

For more information, visit www.sacymf.org

Central Valley Branch

Jasmine Noriega, President, Central Valley Branch

For more information about the Central Valley Branch meetings, please contact Jasmine Noriega at 209-406-8982, or jasmine_noriega@dot.ca.gov.

Shasta Branch

The Shasta Branch is looking for members to fulfill officer and chair duties, including Scholarship Chair and Program Chair. If you are interested, or have questions, please email us at shasta_asce@yahoo.com.

Feather River Branch News

If you have suggestions or recommendations for a meeting topic or location, please contact Amie McAllister at amie.steel@gmail.com or Shane Cummings at sdcummings@handk.net. We are looking to increase our membership participation in our monthly meetings and regular community outreach activities, so please drop us some suggestions.

Capital Branch - September 28th

For more information about the Capital Branch meetings, please contact Jennifer Wheelis at jennifer.l.wheelis@usace.army.mil, or 916-616-5987.

The Law and Civil Engineering

by Eugene L. Bass, Esq.

Mechanic's Liens and the Notice of Completion

Engineers must be particularly aware of the date of completion of a project to protect their mechanic's lien rights. There are cut-off dates for recording mechanic's liens as well as for filing lawsuits to foreclose mechanic's liens that are tied to the date of completion. Failure to take action within the prescribed time limits can result in complete loss of the valuable mechanic's lien right.

If you have a direct contractual relationship with the owner, you are an "original contractor" for purposes of the mechanic's lien laws. Each original contractor, in order to enforce a lien, must record his claim of lien after he completes his contract and before the expiration of 90 days after the completion of the work of improvement if no notice of completion or notice of cessation has been recorded, or 60 days after recordation of a valid notice of completion or notice of cessation.

Each claimant other than an original contractor, in order to enforce a lien, must record his claim of lien after he has ceased furnishing labor, services, equipment, or materials, and before the expiration of 90 days after completion of the work of improvement, if no notice of completion or cessation has been recorded, or 30 days after recordation of a notice of completion or notice of cessation.

The earliest date that a lien can be recorded is after completion, termination or breach of your contract. Be aware that work on the same project may have been performed under more than one contract and that the lien requirements apply to each contract and not the entire project. For example, site improvement work may have been under a separate contract than later works of improvement. The lien timing for the site improvement work will be tied to the site improvement contract. If the continuation of the project is performed under another contract and if the site improvement work is not paid, care must be taken to record the mechanic's lien within the statutory time periods following completion, termination or breach of the site improvement contract.

The recording of a valid notice of completion will result in shortening the time within which a mechanic's lien may be recorded. As stated above the time for an engineer who does not have a direct contract with the owner will have the normal 90 day period after completion reduced to 30 days. The 90 days will be reduced to 60 days if your contract is direct with the owner.

The law sets forth the information that must be included in a notice of completion. Failure to include the required information can invalidate the notice. In addition, strict time limits are set for the recording of the notice of completion. A notice of completion must be recorded within 10 days following the date of actual completion of the project. The notice must also recite the date of actual completion in the document. If an incorrect date of completion is stated in the notice of completion, the notice will not be invalid so long as the true date of completion is within 10 days preceding the date of recording of the notice.

Because of the specific statutory requirements for a valid notice of completion and because of the often uncertainty as to the actual date of completion, there is a relatively high possibility that the recorded notice of completion can be found to be invalid and ineffective to reduce the time periods for recording a mechanic's lien. The subcontractor should never assume that if 30 days have passed since the recording date of a notice of completion that it is too late to record a lien. Legal counsel should be sought immediately to analyze the facts surrounding project completion and the recorded notice of completion.

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Law & Civil Engineering - Continued from Page 5

The author's discussion of legal ramifications of the particular case(s) are provided only for educational purposes and should not be relied on as legal advice. If you have a specific legal problem, please consult with your attorney.

Training Classes on Open Channel, Pressure Flow, and Culvert Hydraulics

Roseville/Sacramento: September 21, October 5, and 6, 2010

DAR Engineering and Associates, Inc. is offering three day training classes for civil engineers on open channel, pressure flow, and culvert hydraulics. Details of class content and registration can be obtained at www.darengineering.com. For more information, send email to info@darengineering.com or call Andrew J. Ranzieri, P.E. at (916) 786-4829.



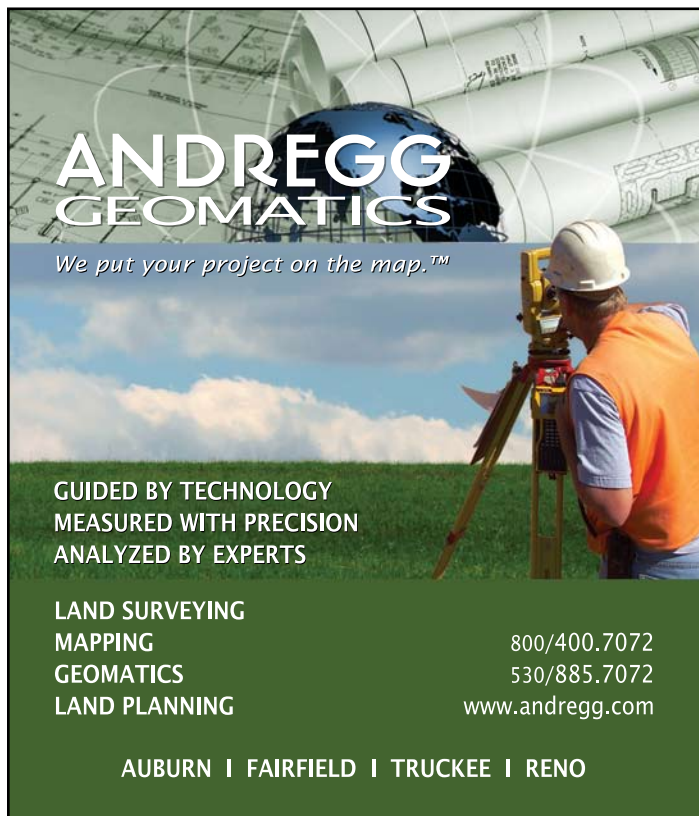
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Sacramento Section Awards Dinner

by Joshua Wagner and Martin Farber

Each and every year, members throughout our Section nominate their co-workers, colleagues and peers for their professional service, their work ethic, for engineering excellence and for outstanding achievement. This year is certainly no exception. The Sacramento Section had the unique opportunity evaluate a great number of nominations this year and this year the Section decided to present a few additional awards. The awards available encompass a multitude of areas: from work in the public/private sector to work within specific areas of engineering like Geotechnical or Water Resources. Many of these new awards have been named in honor of remarkable engineers from our area that have accomplished remarkable feats in their time. The EOG will be highlighting the lives of these past engineers in the coming months. This year's award event and new officers' installation dinner will be hosted at the Holiday Inn in Sacramento on September 9th starting at 6 PM. I encourage everyone to consider coming to this event; it promises to be a memorable night. To register click on the link: [REGISTER HERE](#). A short description of each awardee and new officer are as follows:

Outstanding Civil Engineer in the Private Sector

Ric Reinhardt — MBK Engineers



Ric Reinhardt is a registered Civil Engineer with experience in planning, design and construction of Flood Damage Reduction and Ecosystem Restoration Projects. His project experience includes working as Program Manger on the Natomas Levee Improvement Program, Three Rivers Levee Improvement Authority and the City of West Sacramento's Levee Improvement and as District Engineer for the Reclamation District 2103 and 817 in Wheatland.

Roy A. Imbsen — Imbsen & Assocs Inc



Dr. Imbsen has been a pioneer in developing, implementing, teaching and applying seismic design principles to bridges since the San Fernando earthquake in 1971. He was a co-recipient of the AASHTO Dr. L.I. Hewes Award for the development of the first comprehensive seismic design specifications, which remained in effect for fifteen years. He has directed and participated in the seismic upgrading of several major bridges including the Golden Gate Bridge, Benicia-Martinez Bridge, George Washington Bridge, I-40 Mississippi River Bridge in Memphis, Tennessee, and Tobin Memorial Bridge.

Outstanding Civil Engineer in the Public Sector

Pete Ghelfi — SAFCA



Pete Ghelfi has been the Director of Engineering for SAFCA since 2000. He has been involved in numerous flood control projects that have led to increased flood protection to the Sacramento area. Projects worked on in-

Continued on Page 7

Sacramento Section Awards Dinner - Continued from Page 6

clude slurry wall construction along the Sacramento and American Rivers, various levee repair projects, under-seepage remediation, erosion protection, improvements to Folsom Dam, levee certifications along the American River, Sacramento River and South Sacramento Streams, and the re-mapping of over 82,000 parcels out of the regulatory floodplain.

Joseph W. Gross Award for Outstanding Achievement in Humanitarian Service — Presented by the Sacramento Section, ASCE



Joseph W. Gross (1884 – 1952) graduated from the University of California at Berkeley in 1907 with a Bachelor of Science in Civil Engineering. In 1920, he opened his own office in Sacramento, specializing in municipal and agricultural engineering. Thereafter, he was closely identified with water problems in northern California. During the depression years, much of his time was devoted to finding or helping “make” temporary jobs for unemployed engineers. Through his efforts, the Sacramento Section built up an “unemployment fund,” later known as the Joseph W. Gross Relief Fund.



George Qualley — Retired

George was raised on a grain and cattle farm in eastern North Dakota, and earned his Civil Engineering degree from North Dakota State University in 1969 (Go Bison!). He started his engineering career that year with the Division of Highways (now Caltrans), transferring in 1975 to the Department of Water Resources. The 34 years of his career spent with DWR have been split about evenly between State Water Project and Flood Management activities. George retired from DWR in June 2009, but remains actively involved in development of the Central Valley Flood Protection Plan and other flood-related activities through his half-time work as “Retired Annuitant for Flood Management Issues”.

Outstanding Civil Engineering Student



Andrew Langelier — CSU Chico

Andrew is currently a senior at CSU, Chico and is studying civil engineering with honors. He has served his student chapter as Treasurer and recently served as chair for the 2010 Mid-Pacific Conference. Andrew is an EIT and he has interests in Water Resources Engineering. Upon graduating he is interested in pursuing his doctorate.



Caldean Bischoh — UC Davis

“As a student of Civil Engineering, I have found myself most interested in the people around me. I am inspired by the selflessness of my colleagues. I’ve learned, from personal experience, that Civil Engineers often have an inherent urge to serve others. Seeing this attribute in classmates has prompted me to involve myself in outreach programs, like that found in the Student Recruitment and Retention Center (SRRC)

on the UC Davis Campus. Additionally, as the UC Davis ASCE President, I was able to advise underclassmen by drawing examples from my own hardships. I hope to further immerse myself in such service, improving our environment, while always bearing in mind the well being of people.”



Jesse Ogren — CSU Sacramento

Jesse Ogren has been involved with ASCE for the past three years, and during that time he has served as Captain of the steel bridge team for two years. He is currently the President of the ASCE student chapter at Sacramento State. In addition to this, Jesse has been a member of SEA OCC (Structural Engineers Association Of Central California) for two years, and has participated in the past two wood truss design/build competitions, where his team won 1st place in both competitions. In May, 2011, Jesse will graduate from Sacramento State University with a Bachelor of Science Degree in Civil Engineering. He has been working in industry as an intern with Parsons Brinckerhoff for the past three years. As a professional, Jesse would like to continue serving his student chapter as an advisor. In this position, he would have the opportunity to advise students on internal student chapter matters and provide students with networking opportunities within the industry.



Caroline Grant — University of the Pacific

Caroline Grant is a senior honors student in the University of the Pacific Civil Engineering program. She currently serves her school as ASCE collegiate section President, Co-Captain for the 2010-2011 Pacific Steel Bridge Team, and site Co-Captain for Pacific’s California Cleanup site. In addition to her role in ASCE, Caroline is also active in the Society of Women Engineers, participating in this year’s Pacific’s Boeing Team Tech Group. In previous years, Caroline has served as ASCE Vice President, Steel Bridge Administrative Captain, SWE Secretary, and SWE Region A Conference Co-Chair. After her graduation in 2012, Caroline plans to continue her education and pursue a Masters Degree in Civil Engineering.

Lifetime Achievement Award



Joe Countryman — MBK Engineers

Joseph Countryman graduated from CSU, San Jose, with a BS in Civil Engineering in 1966 and is a registered Civil Engineer in California and Nevada. He has had a long career working with MBK Engineers and the US Army Corps of Engineers. During his time with these two entities, Joseph was involved in the fields of hydrology, hydraulics, flood control, water supply, and water resources development. The projects he has worked on span the length of California and he has worked many dams and levees in our great state.

Continued on Page 8

Sacramento Section Awards Dinner - Continued from Page 7

Outstanding ASCE Life Member



Dr. G. Fred Lee — G. Fred Lee & Associates

Dr. Lee has been a full-time consultant through the firm of G. Fred Lee & Associates since 1989 when he moved to El Macero (near Sacramento). This firm specializes in evaluating and managing the impacts of chemicals on water quality, advanced level water supply water quality, water and waste water treatment, water pollution control, and solid and hazardous waste investigation and management. Dr. Lee has established a website, www.gfredlee.com, where he has make available over 600 papers and reports developed from his research and consulting activities. In December 2009, Dr. G. Fred Lee was elected as an ASCE Fellow. This election recognizes Dr. Lee's five decade career as a national/international leader, university graduate level educator and environmental consultant.

Jonathan Burdette Brown Award for Outstanding Achievement in Engineering Education — Presented by the Sacramento Section, ASCE



Jonathan Burdette "J. B." Brown (1887-1948) graduated from UC Davis as a Bachelor of Science in Civil Engineering in 1912. In addition to his 23 years of service as UC Davis Extension Specialist in Irrigation, Mr. Brown served as Lecturer and Associate in Irrigation at Davis from 1945 until his death.

Throughout these periods with the University he proved himself to be a capable worker, sound and practical in his approach, clear in both his oral and written presentations, and in a high degree, friendly and cooperative in his relations with farmers and students. In 1928, Brown served as the 7th President of the Sacramento Section of ASCE.



Dr. John Johnston — CSU Sacramento

Dr. John Johnston received his Doctorate in Civil Engineering (Environmental) at the University of California, Davis, and his B.S. and M.S. degrees in Civil Engineering at Stanford University. He is a licensed Civil Engineer with the State of California. Dr. Johnston has taught environmental and water resources engineering classes at both Sacramento State and Fresno State. Since 1999, he has been the senior technical adviser for the Office of Water Programs Research Group, assisting Caltrans with its stormwater research program. His current scholarly interests include the design, performance, and deployment of stormwater treatment technologies. Dr. Johnston's most recent work includes techniques for turbidity and phosphorus removal in the Tahoe Basin. Other interests include water quality management issues such as TMDLs, and wastewater treatment using natural systems. (Fresno State University Website)



Outstanding ASCE Practitioner Advisor

Josh Wagner — USACE

Joshua Wagner, a recent grad as of May 2009, has been involved with ASCE for the past four years. As a student, he served as Secretary, Treasurer and President for his student chapter. He currently works as an Engineer-in-Training for the US Army Corps of Engineers on their rotation program. He is still active with the Student Chapter at Sacramento State as their Practitioner Advisor where he helps the students by providing advice, project tours and networking opportunities. He is looking forward to begin working on the Folsom Dam spillway in Folsom, CA.

Outstanding Younger Civil Engineer



Shauna England — USACE

Shauna graduated in May 2010 from California State University, Chico with a Bachelor of Science Degree in Civil Engineering. Shauna currently works for the U.S. Army Corps of Engineers where she is working on the Folsom Dam Auxiliary Spillway located in Folsom, California. By constructing this additional control structure and spillway an estimated 600,000 people occupying homes and towns downstream of Folsom Dam will be protected during a 200-year event. Shauna is also involved with the American Society of Civil Engineers (ASCE), specifically the Construction Institute (CI). Shauna will help to organize and coordinate the 2011 Student Days Conference held in Sacramento, California.

Drury Butler Award for Officer of the Year — Presented by the Sacramento Section, ASCE



Drury D. Butler (1877 – 1964) earned a Civil Engineering degree from the University of California in 1903. In 1935, after 20 years of service as Sacramento County Surveyor, Butler returned to private practice. Butler joined ASCE in 1919 and was a founding member of the Sacramento Section in 1922. He served as chair of several committees and as 6th President of the Section in 1927.



Jeremy Zorne — Geocon

Jeremy Zorne received both Bachelor's and Master's degrees in Civil Engineering from Sacramento State, and is a licensed civil and geotechnical engineer in California. He is a Senior Project Engineer with Geocon Consultants, Inc. a geotechnical engineering and environmental consulting firm in Sacramento. He manages projects ranging from geotechnical investigations for design of new facilities to geotechnical testing and observation services during construction. Typical projects include: public works facilities, water/wastewater treatment/distribution facilities, residential developments, commercial/industrial developments, utility infrastructure, transportation infrastructure, and parks and recreation facilities.

Continued on Page 8

Sacramento Section Awards Dinner - Continued from Page 8
Outstanding ASCE Branch Member Officer



Shane Cummings — Feather River Branch

Shane Cummings has had the honor of serving as the President of the Feather River Branch for the past two terms from 2008 to 2009 and from 2009 to 2010. Shane has a Bachelor of Science degree in Geology from CSU Chico and is the operations manager for the Chico office of Holdrege & Kull Consulting Engineers and Geologists. Shane is responsible for business development, operations, and project management and performs and oversees field investigations for geotechnical and material testing projects, geologic hazards evaluations, environmental investigations, environmental site assessments, and remediation of contaminated sites. Shane is a licensed Professional Geologist, Certified Hydrogeologist, and Certified Engineering Geologist with the state of California. He also serves as a Subject Matter Expert for the California Board of Professional Engineers and Land Surveyors assisting with the geology division in preparing material for the Professional Geologist, exam, Certified Hydrogeologist exam, and Certified Engineering Geologist exam, and technical expert review and opinions on enforcement cases. Shane is married to Heidi Cummings, also consulting geologist, and they have a 17 month old daughter.

Outstanding ASCE Younger Member Officer



Kimberly Brown — HDR

Kimberly graduated from Cal Poly, SLO with a BS in Civil Engineering in 2005 and a MS in Civil & Environmental Engineering in 2007. She has worked in the geotechnical engineering field since 2006 and currently works for HDR Inc. in Folsom. Kim has been involved with ASCE since she was a student at Cal Poly, and eventually served as a YMF officer upon moving to Sacramento in 2006. Kim is currently the Executive Director of the Sacramento Section YMF and a Committee on Younger Members representative for Region 9. In addition, she serves on the Golze scholarship committee for the Sacramento Section and has helped the Mid-Pacific Student Conference conference this last year as a judge for the concrete canoe competition.

Legislator of the Year



Senator Darrell Steinberg

Darrell S. Steinberg served on the Sacramento City Council from 1992-98, representing the 6th District, where he founded Sacramento START (Students Today Achieving Results for Tomorrow), a free literacy-based public/private after-school program. He was a member of the California State Assembly from 1998 until he was termed out in 2004. He is currently serving in the California State Senate (since 2006) representing the 6th District. He has been the Senate President Pro Tem since 2008.

Thomas E. Stanton Award for Outstanding ASCE Event — Presented by the Sacramento Section, ASCE



Thomas E. Stanton (1881 – 1962) attended the University of California at Berkeley where he received a B.S. degree in mining. In 1912, he accepted the position of Principal Assistant Division Engineer in the California Division of Highways. He was promoted to the position of Materials and Research Engineer in 1928, which position he occupied for the succeeding 23 years until his retirement in 1951. In 1930, Stanton served as the 9th President of the Sacramento Section of ASCE. In that year, the Section hosted the ASCE National Conference.



Pal Hegedus — RBF Consulting

Pal Hegedus has received the Sacramento Section's David N. Kennedy Award for achievement in the field of Water Resources Engineering in 2007-08. In 2008, he organized and chaired the Sacramento Section's chapter of the Environmental and Water Resources Institute (EWRI), bringing together engineers, environmental scientists and regulatory specialists from the public and private sectors to discuss critical issues related to water and the environment. A Vice President with RBF Consulting in Sacramento, he leads RBF's Northern California Water Resources Department. Named a Diplomat of Water Resources Engineering by the American Academy of Water Resources Engineers (AAWRE), he is also currently serving and Vice Chair of the Floodplain Management Association (FMA), and in 2006 was selected as "FMA Floodplain Manager of the Year."



Robert Shibatani — The Shibatani Group, Inc.

Robert Shibatani is a physical hydrologist and CEO of The Shibatani Group, Inc. With 25 years of collective experience in physical hydrology, watershed resource management, and operational water consulting, he is a noted expert in long-range water supply development and an acknowledged international practitioner in snowmelt hydrology and potential hydrological regime shifts due to long-term climate forcings. Mr. Shibatani works closely within the context of CVP/SWP, COA, OCAP and Delta operations, American River watershed hydrology, federal water contracting, water transfers, and regional multiple-party water agreements. Mr. Shibatani is an adjunct industry instructor in the UC Davis - Graduate and Post-Doctoral Studies Program, Programming and Technology Committee Member for Capital Public Radio/NPR, and the current Vice Chair for the Sacramento Chapter of the EWRI.



Pamela Creedon — Central Valley Water Quality Control Board

Pamela Creedon is the Executive Officer of the Central Valley Water Quality Control Board. She is a licensed Civil Engineer and

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Sacramento Section Awards Dinner - Continued from Page 9

a Board Certified Environmental Engineer with over 29 years of professional experience, developing and implementing water quality regulatory programs. She serves on the ASCE National Energy, Environment and Water Policy Committee, chairs the CSUS Environmental and Water Resources Advisory Committee, and serves on the Board of Directors of the Sacramento Section Chapter of the Environmental & Water Resources Institute (SSEWRI).

Charles S. Pope Award for Outstanding Achievement in Construction Engineering — Presented by the Construction Institute, Sacramento Section, ASCE



Charles S. Pope (1874 – 1938) graduated from Stanford University with an A.B. in C.E. in 1897. During his career, Mr. Pope was appointed by the California Highway Commission as head of the Construction Department as Construction Engineer in charge of the Materials and Research Laboratory and of all highway construction, except major bridges. His numerous technical and scientific papers, articles, and discussions contributed materially to the knowledge of highway engineering and are widely recognized as authoritative. In 1924, Pope served as the 3rd President of the Sacramento Section Chapter of ASCE.



Louay Owaidat — Magnus Pacific

Louay Owaidat is the President and CEO of Magnus Pacific, a heavy Civil Construction Company. Louay is instrumental in leading his company to the successful completion of hundreds of flood protection projects in Northern California and he serves on the Board of Directors for the Sacramento Section of the Construction Institute. Louay also provides technical expertise to support the design, planning, and execution of Magnus Pacific's geotechnical construction and site remediation projects throughout the United States.

Francis N. Hveem Award for Outstanding Achievement in Geotechnical Engineering — Presented by the Geo-Institute, Sacramento Section Chapter, ASCE



Francis N. Hveem (1898 – 1990) started his career in 1917 as a draftsman for the Division of Highways in Dunsuir. Hveem was ultimately promoted to Materials and Research Engineer in 1951, and served in that position until his retirement in 1963. Some of the better known devices and test methods he developed are the stabilometer, the cohesiometer, sand equivalent apparatus, and profilograph. His formulas for the design of asphalt pavement are also recognized as one of his outstanding contributions to the highway science field. In 1956, Hveem served as the 37th President of the Sacramento Section of ASCE.



Ray Costa — Retired

Mr. Costa received his BS degree in civil engineering from UC Davis and is a California registered civil and geotechnical engineer. He has spent the majority of his 34

year career with Kleinfelder in northern California. He has also managed Kleinfelder's Saudi Arabia for a two year assignment. He has worked on many area projects including mid- and high rise buildings and parking structures in Sacramento (Hyatt Regency, Holiday Inn, Riverview Plaza, and K Street Mall), SMUD transmission lines, Regional San wastewater interceptors, and 10 California State Prisons. For the past 15 years, he has worked almost exclusively on flood control projects – primarily levees. He has worked on almost every flood district levee in the Sacramento River flood control system. Mr. Costa retired from Kleinfelder in 2007 after 30 years. He continues to consult on a part time basis for Kleinfelder, the California Department of Water Resources, and several levee districts.

Frederick W. Panhorst Award for Outstanding Achievement in Structural Engineering — Presented by the Structural Engineering Institute, Sacramento Section Chapter, ASCE



Frederick W. Panhorst (1893 – 1974) received his bachelor of engineering degree in 1915 and his professional degree in 1916 from the University of Illinois. Mr. Panhorst came to California in 1927 as Construction Engineer for the Bridge Department of the Division of Highways. In 1947 he attained the position of Assistant State Highway Engineer – Bridges, where he served until his retirement in 1960. Panhorst was a past National Director of the American Society of Civil Engineers, and the 18th President of the Sacramento Section (1939).



Ray Zelinski — Retired

Mr. Zelinski served 40 years as a bridge engineer with Caltrans, including 15 years as a construction engineer and 25 as a design engineer. 21 of the design years were heavily focused on earthquake engineering. His final four years at Caltrans were spent as Chief of the 40-person Office of Earthquake Engineering. Mr. Zelinski retired in January, 2003. 1974-1975, Ray was Bridge Resident Engineer on the Pine Valley Creek Bridge, the first CIP Concrete Segmental Bridge constructed in the U.S.

David N. Kennedy Award for Outstanding Achievement in Water Resources Engineering — Presented by the Environmental and Water Resources Institute, Sacramento Section Chapter, ASCE



David N. Kennedy (1935 – 2007) earned a bachelor's degree in civil engineering in 1959, and a master's degree, also in civil engineering, from the University of California at Berkeley in 1962. Between 1983 and 1998 Kennedy served with distinction as the director of California's Department of Water Resources. After Hurricane Katrina, he served as a member of ASCE's External Review Panel, which assessed the performance of the hurricane protection system in New Orleans and southeastern Louisiana.

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Sacramento Section Awards Dinner - Continued from Page 10



Tim Quinn — Association California Water Agencies

As executive director of the Association of California Water Agencies (ACWA), Timothy Quinn leads the largest water organization of its kind in the nation. With offices in Sacramento and Washington, D.C., ACWA is a statewide association whose 450 local public water agency members are responsible for about 90% of the water delivered in California. Quinn became ACWA executive director in July 2007 and has more than 25 years of experience in California water issues. He has worked on several key policy initiatives, including the Bay-Delta Conservation Plan now under development to protect endangered and sensitive species and provide regulatory assurance to water users.

William H. Hall Award for Outstanding Achievement in Flood Control Engineering — Presented by the Environmental and Water Resources Institute, Sacramento Section Chapter, ASCE



William H. Hall (1846 – 1934) was a civil engineer who was the first State Engineer of California, and designed Golden Gate Park in San Francisco, CA. As California's State Engineer, Hall worked on a comprehensive water supply and flood control system for the Sacramento Valley. Hall's study of California's hydrology lasted from 1878 through 1883. In

that time, his staff installed an extensive flow gauging system along some of California's rivers. He was also instrumental in designing projects to help San Francisco acquire adequate supplies of water from the western watershed of the Tuolumne River.



Ricardo Pineda — Department of Water Resources

Ricardo S. Pineda, P.E., CFM is Chief of the Floodplain Management Branch of the California Department of Water Resources. Ricardo, a registered Professional Engineer in the State of California, is also the State's National Flood Insurance Program manager. He has a Bachelor of Science Degree in Civil Engineering from Santa Clara University (1980) and Master of Science Degree in Civil Engineering from California State University Sacramento (1986). Mr. Pineda has over 30 years of experience as a Civil Engineer with the California Department of Water Resources.

Arthur L. Elliott Award for Outstanding Achievement In Bridge Engineering — Presented by the Structural Engineering Institute, Sacramento Section Chapter, ASCE



Arthur Elliott is featured in this month's History and Heritage column. Kevin Thompson, this year's winner of the Elliott Award, is featured in this month's Honors and Awards column.

Steward Mitchell Award for Outstanding Achievement in History and Heritage — Presented by the Sacramento Section, ASCE

Stewart Mitchell (1885 – 1968) graduated from Purdue University in 1908 with a B.S. degree in Civil Engineering. He came to California



to accept a position with the Division of Highways in 1924, where he served continuously until his retirement, first as bridge maintenance engineer, then successively as bridge construction engineer, engineer in charge of bridge planning and design and engineer in charge of special investigations. Mitchell was 27th president of the Sacramento Section of the American Society of Civil Engineers [1947]. He was a recognized authority on California immigrant trails, and he published several authoritative articles on this subject.



Donald Wayne Alden (1921-2010)

Don Alden has had a life of achievement in the field of engineering. Don's journey began at the University of California in Berkeley where his studies were interrupted by World War II. During the war, Don served on an advance survey crew for the Alaskan Highway and later developed a love of flying as he worked as a meteorologist for the U.S. Army Air Corps. After the war, Don returned to Berkeley to finish his degree in Civil Engineering. Degree in hand, Don joined the Bridge Department of the California Division of Highways (now known as CalTrans), where he spent the next 37 years. These years would see work in the design, specifications, and construction oversight for bridges throughout the state starting with a four-level structure in Los Angeles and concluding with his return from retirement to review the qualifications of the Bay Bridge Replacement contractor. Later Don became a Project Manager and Specifications Writer for Roy Imbsen and Associates. As his years increased, Don Alden did consider full retirement but he was always coaxed back by the inducement of "just one more project."



Norman Root — CalTrans

Mr. Root earned a bachelor's degree in Civil Engineering from the University of New Mexico and his career of 53 years would include traffic engineering, bridge and highway design and construction support on highways and bridges throughout New Mexico and California. Norman is a member of a number of professional organizations and he has had the distinction of having a few papers published by the Transportation Research Board. Norman has also served as California State Director of the Lincoln Highway Association, Chairman of the Caltrans History Preservation Committee, and President of the Board of Directors of the California Vehicle Foundation.

In addition to the awardees, the Section has a few new officers that will be joining the Sacramento Section Board of Directors. Some information on each is as follows:

President: **Oscar Serrano, P.E.**

Oscar Serrano is the Senior Water Engineer for the Colusa Indian Community Council where he manages all water related activities. Prior to working with the community, Oscar worked for West Yost Associates as a design and water resources engineer. Oscar has a bachelor's degree in Civil Engineering from California State University, Sacramento and a master's degree in Environmental Engineering from the University of California, Berkeley. Mr. Serrano previously served as President-Elect, YMF Board Representative, Sacramento Section YMF Executive Director and as a corresponding member to the ASCE National Committee on Younger Members. As YMF

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Sacramento Section Awards Dinner - Continued from Page 11

President, Mr. Serrano helped increase membership, assist local universities, and helped raise over \$17,000 for the Make-A-Wish foundation.

President-Elect: **Jon Balzer, P.E.**

Jon has served as an Advisor for the ASCE Construction Institute (CI) Group in the Sacramento Section since 2007 and helped lead the CI Scholarship Program and Evaluation Process for both the Sacramento and San Francisco Sections. During this time, Jon also assisted in Young Member Leadership Conferences and Student Day Events, as well as getting involved in the ASCE CI National Group.

Executive Director: **Greg Zeiss, P.E.**

Greg Zeiss has held the offices of President for both the Sacramento Section (2004/2005) and the Capitol Branch (2002/2003). His additional ASCE offices held include Section President Elect, Section Senior Director, Branch Vice President, Branch Secretary, and Branch Treasurer. For the last three years, Greg has been the co-chair of the ASCE Sacramento Section Construction Institute. He was part of the team that initiated the formation for the Engineer's Without Borders in Sacramento and has been active in the ASCE Sacramento Section Scholarship and Awards Committees for the last five years.

Senior Director: **Greg Young, P.E.**

Greg is an associate bridge and roadway project engineer for Quincy Engineering in Sacramento. He began his career at Quincy Engineering as an intern in 1999 and over the past ten years he has served as a design engineer, project engineer, and field structure representative for many local agency transportation projects throughout the state of California. He graduated from UC Davis with a BS in Civil Engineering and while attending UC Davis, Greg participated in ASCE student chapter activities all four years. Upon graduation, Greg joined the Sacramento Section of YMF and served as the student affairs chair. He is currently the UC Davis practitioner advisor and outgoing Junior Director. Greg has put on various resume workshops and coordinated closely with the student chapters at UC Davis, Sacramento State, Chico State, and University of Pacific.

Junior Director: **Kimberly Brown, P.E.**

Kimberly, this year's winner of the Outstanding ASCE Younger Member Officer Award, is featured above.

Treasurer: **Joshua Wagner, EIT**

Joshua is this year's winner of the Outstanding ASCE Practitioner Advisor. His bio is featured above.

Secretary: **Mark Quito**

"ASCE has played a big part in my college and professional development. It gave me experience and lasting friendships with Civil Engineering professionals. As a professional I think it is time to keep the legacy going for other young inspiring engineers. As Secretary, I can continue this legacy as well as push the electronic era even further. I would like to improve on the website, database keeping, and communication between our chapter, other organizations, and the student chapters in a more efficient way." Mark works for Parson Brinckerhoff and recently served as the President of the Sacramento Valley Professional Chapter of Engineers Without Borders.

ASCE July 2010 Board of Directors Meeting

*by Chuck Spinks, P.E.
Director, Region 9*



Our Society (National) Board of Directors held its annual summer meeting this past July 10 and 11 in Salt Lake City. It was a very productive meeting and we addressed a long list of agenda items. One of the topics that consumed a major part of the discussions was "our interaction with our students and younger members."

An important task that has been present since the Society organized into Regions several years ago is how to improve interaction between student groups at the universities and the Branches, Sections, and the Region. Some of our Branches and Sections have been very involved with their local student groups, but many of the student groups are probably not as familiar with how the Society is organized and how the Region can help them. In 2009, the Society Board created the "Task Committee on Region – Student Relations" to explore ways to enhance the relationships between the Student Groups and the Regions. Since most students do not have many opportunities to interact with officers from the Branches, Sections, and Regions, this creates a challenge in keeping them involved in ASCE after they graduate. Part of the challenge is attributed to the universities organizational boundaries, which cross our established Region boundaries.

In Region 9 (California), the university organizations include the Mid-Pacific Region in Northern California and the Pacific Southwest Region in Southern California, both of which include universities from other states. With the presentation of the report by the Task Committee, Region 9 will be putting together a plan for providing more effective support to the student groups in this Region, with an emphasis on helping support the annual student conferences.

Another item we addressed with some lengthy discussions at the Board Meeting in Salt Lake City, was how the Society can help members who have lost their jobs during this economic downturn. We created a page on our web site at <http://www.asce.org/> called, "Survive & Thrive in a Challenging Economy." Though the title can use some enhancements, the content provides links to programs and resources that you and your company can get during this challenging economy, including job search and personal finance information. Our ASCE staff is continually working hard at making the site easier and more intuitive to locate. You can find the site by following this link: <http://www.asce.org/Content.aspx?id=2147484170>.

For Sections and Branches that are looking to enhance their international perspective, Region 10 (International), which includes the 13,336 members and 14 Sections outside of the U.S., is interested in expanding its "Sister Section" program. The goal of this program is to develop increased understanding and communication between our international members and our local groups. I think this is a great opportunity to reach out and interact with the 10% of our international ASCE members who are spread throughout the world, and network in this truly global economy.

History and Heritage

by Martin A. Farber, PE, D.WRE

On September 9, officers, members, and guests of the Sacramento Section of ASCE will gather at the Holiday Inn, Capitol Plaza, for our annual Installation and Appreciation Dinner. An important part of the festivities will be the presentation of awards offered by our Section for outstanding individual achievement. Many of these awards are named after civil engineers from this area's history, now deceased, that the Section has chosen to honor for their notable contributions to the profession, this Society, our community, the country, and the world. Each month, in this column, we will profile one of these remarkable engineers.

This month's historic engineer: **Arthur L. Elliott, PE, F.ASCE**



Arthur L. Elliott (1911 - 2004)

Arthur Leonard Elliott was born in Seattle, Washington, in 1911. His father, a civil engineer, moved the family into tents at various road-building sites. The experience gave his son early insights into his future career. The family ultimately settled in Portland, Oregon, where Mr. Elliott graduated from high school. He attended the University of Washington, graduating in 1933 with a degree in civil engineering. His professional career began with the U. S. Bureau of Public Roads on various Pacific Coast projects. From 1934 to 1936, he served as a construction engineer for the State on the San Francisco-Oakland Bay Bridge. After the span was opened to traffic on November 12, 1936, Mr. Elliott transferred to the Bridge Department of the California Division of Highways (today Caltrans). At the end of World War II, Mr. Elliott moved to Sacramento. In 1953 he was named the state's chief of bridge planning. In that capacity, he supervised the design of bridges and other structures. At the time, Caltrans owned more than 8,000 structures on the state highway system, of which more than 6,000 were bridges.

Elliott achieved worldwide recognition as an authority on bridge design. He author professional papers, magazine articles and textbook chapters on various bridge topics. Art was also known for his bridge engineering cartoons.

In 1963, as a consultant to the Agency for International Development of the State Department, Elliott went to the Republic of the Congo, Africa, on a United Nations-sponsored highway and bridge rehabilitation project. He was also engaged as a consultant in lawsuits in Oregon and Alaska.

Through affiliations with national professional organizations, Elliott has made major contributions which have furthered techniques in bridge-building. He has been on the Bridge Committee of the American Association of State Highway Officials (today called AASHTO), and chairman of the Structures Section of the Highway Research Board of the National Academy of Sciences.

Elliott was a member of the California Governor's Interagency Earthquake Committee, an alternative member of the Governor's

Earthquake Council, and served on the Advisory Board for the Strong Motion Instrumentation Program. He also served as an advisor for a Federal Highway Administration-sponsored research program carried on at the University of California at Berkeley.

Elliott was a Fellow of the American Society of Civil Engineers and a member of the International Association of Bridge and Structural Engineering. In February of 1973, he was presented with an award for "Outstanding Service to the Profession" by the Engineering Council of the Sacramento Valley.



notes by Editor

three overweight
ironworkers
on wrench

Main Cable

Art Elliott Cartoon -1938 - SFOBB

Elliott retired in September 1973 after nearly 40 years of service to the State of California. In 1993 Elliott received the John A. Roebling Medal for lifetime achievement in bridge engineering from the Engineers Society of Western Pennsylvania.

"My father was a very creative man with a diversity of interests," Mr. Elliott's son, Leonard T. Elliott, said. "He was a woodcarver, a clock collector, and he wrote magazine articles and papers, as well as textbooks on bridge aesthetics, design and construction."

"My father was interested in improving bridge aesthetics," his son said. "He was a pioneer of trying to improve the appearance of bridges and utilizing new techniques. He felt a lot of satisfaction in what he was able to accomplish."

A member of the Ben Ali Shrine Temple, Mr. Elliott often performed with the Ben Ali Chanters at the Shriners Hospitals for Children in Sacramento.

"He was a very caring person," his daughter, Diane Wood, said. "He certainly cared about his family and other people that he worked with and met."

Sources: *California Highways and Public Works, V32, Sep-Oct 1953, p49; California DMV archives; Sacramento Bee, 19 January 2005; Personal communication, Al Mangus, 2010.*

Is Your Membership Information Current?

by Fareed Pittalwala, Past-President

Please ensure that your membership information is up to date with ASCE's national database, as our local system is dependant on your information being current. It's a quick and easy fix that you can accomplish in less than five minutes by going to: <http://tinyurl.com/yhl6pvd>.

Honors and Awards

by Martin A. Farber, PE, D.WRE

On September 9, officers, members, and guests of the Sacramento Section of ASCE will gather at the Holiday Inn, Capitol Plaza, for our annual Installation and Appreciation Dinner. An important part of the festivities will be the presentation of awards offered by our Section for outstanding individual achievement. Each month, in this column, we will profile one of these award-winning engineers.

This month's outstanding engineer: **Kevin J. Thompson, PE**, winner of the Arthur L. Elliott Award for Outstanding Achievement in Bridge Engineering.



Kevin J. Thompson is a graduate of Arizona State University with a Bachelor of Science in Civil Engineering. He worked for the California Department of Transportation (Caltrans) for 27 years. During that time, he held a variety of positions in Highway Design, Highway and Structure Construction, Contract Advertisement and Award, and Transportation Man-

agement. The majority of his experience is in the area of Bridge Design. Mr. Thompson is the chair of the AASHTO Tunnel Committee and serves on the Transportation Research Board.

Mr. Thompson retired as the State Bridge Engineer for the in 2010. He was also the Deputy Division Chief for Structure Design in Caltrans' Division of Engineering Services. As Chief of Structure Design, Mr. Thompson directed the work of approximately 320 people in five structure design offices. In addition, he was responsible for the work of all Structure Design Technical Committees and Specialists in the review, approval and maintenance of bridge design, criteria, procedures, standard details and workforce development.

Probably the most discussed bridge repair under his leadership was the MacArthur Maze fire damage repair. On April 29, 2007, a tanker truck crashed and burned on the lower deck of the interchange, and 1,200 tons of concrete and steel came crashing down from the upper deck. In a remarkable display of emergency-response dexterity, Caltrans engineers burned the midnight oil, and produced 30 pages of new plans for the bid package in 2-1/2 days. Bids were opened on May 7 at 4 AM, and steel for the girders was delivered to the fabricator in Arizona by 6 AM. A survey layout in three dimensions was completed within 20 hours of the 4 AM bid opening. Caltrans' team of design support, welding inspectors, and bridge engineers reviewed shop drawing submittals, welding inspections, and materials fabrication in record time. The opening of the ramp was completed on May 24, just 26 days after its fiery collapse, and only 17 days after the winning bid was announced.

The Arthur L. Elliott Award for Outstanding Achievement in Bridge Engineering is presented annually by the Sacramento Section of ASCE. The outstanding engineers who have received this award are:

- 2008 Alfred R. Mangus
- 2009 Not awarded
- 2010 Kevin J. Thompson

SAVE THE DATE

EWB Sac Valley Professionals present:

Autumn Moon Auction Fundraiser

Thursday September 30th ~ 6:00 PM

Urban Hive ~ 1931 H Street Sacramento, CA 95811

Benefit to spread awareness and support
for future EWB projects.

Invitation and details to follow

For more information please contact Laura Gardea 916.835.7842

Sponsored by:



Thomas W. Blackburn Has Been Elected to Fellow

by Larry J. Smith, P.E., F.ASCE

Thomas W. Blackburn, CE, GE, co-founded Blackburn Consulting (BCI) with his wife Grace in October, 1998. Tom has played a significant role as president and majority owner to grow the firm to about 35 employees, 14 registered engineers. Blackburn consulting is ranked 39 of 50 in the “Best Firm to Work



For” competition. Mr. Blackburn is recognized as an outstanding engineer in our community and in the ASCE Sacramento Section. Mr. Blackburn has served as a leader in ACEC and has continually supported ASCE at the Section and Branch levels. Mr. Blackburn served as a peer reviewer under ASFE’s peer review program and as an expert witness.

Tom has served as Principal in Charge and/or project manager over many important projects in our region. Tom served as a Geotechnical Exam Judge and a technical expert for California’s Board of Registration Enforcement Unit.

Tom is the recipient of many Honors and Awards including the Sacramento Section 2009 “Francis N. Hveem” Geotechnical Engineer Award.

It is indeed my honor to congratulate Mr. Thomas W. Blackburn to the 2010 Class of ASCE Fellows.

ASCE Fall 2010 – Winter 2011 Continuing Education Seminars and Computer Workshops

by Michael W. Cook, Senior Manager, Geographic Services

In our continuing effort to enhance communications between ASCE’s Sections and Branches and ASCE Headquarters, Geographic Services is pleased to provide you with the following list of upcoming ASCE Continuing Education seminars and workshops in your geographic area.

Copies of the Region list, as well as a list of Fall 2010 – Winter 2011 seminars and workshops for all ASCE Regions, can be downloaded from the Region 9 website at <http://www.asce.org/PPLContent.aspx?id=10134> under the “Links” tab.

| DATES | SEMINARS AND COMPUTER WORKSHOP LINKS | Technical Division | City/State |
|----------------------|---|------------------------------|-------------------|
| November 4-5, 2010 | Design and Strengthening of Shallow Foundations for Conventional and Pre-Engineered Buildings | Structural | San Francisco, CA |
| November 4-5, 2010 | Finite Elements in Geotechnical Engineering | Geotechnical | Sacramento, CA |
| November 18-19, 2010 | Bridge Rehabilitation | Structural | Los Angeles, CA |
| November 18-19, 2010 | Risk- Based Seismic Design and Evaluation ~New | Structural | San Francisco, CA |
| December 9-10, 2010 | Construction Contract Management | Construction/Development | San Diego, CA |
| December 9-10, 2010 | Pipe Selection for Municipal Facilities | Hydraulics & Water Resources | Sacramento, CA |
| December 9-10, 2010 | Wind Loads for Buildings and Other Structures | Structural | San Francisco, CA |
| January 13-14, 2011 | Design and Installation of Buried Pipes | Geotechnical | San Francisco, CA |
| January 20-21, 2011 | Leadership Development for the Engineer | Management & Leadership | San Diego, CA |
| January 20-21, 2011 | Progressive Collapse Mitigation: Practical Analysis Methods and Proven Solutions | Structural | San Francisco, CA |
| January 26-28, 2011 | Dam Breach Analysis using the Hydrologic Engineering Center’s River Analysis System HEC-RAS | Hydraulics & Water Resources | San Diego, CA |
| February 2-4, 2011 | GIS for Hydraulic and Hydrologic Modeling Using ArcGIS Desktop ~New | Hydraulics & Water Resources | San Diego, CA |
| February 3-4, 2011 | Modern Detectors for Traffic Surveillance Management, and Traveler Information ~New | Transportation | San Francisco, CA |
| February 10-11, 2011 | Stormwater BMPs That Work: Effective Analysis, Design and Maintenance | Environmental | San Diego, CA |
| February 17-18, 2011 | Financial Management for the Professional Engineer | Management & Leadership | San Francisco, CA |
| February 23-25, 2011 | Introduction to Tunnel Design and Construction | Geotechnical | Sacramento, CA |
| February 24-25, 2011 | Aluminum Structural Design with the 2010 Aluminum Design Manual | Structural | San Diego, CA |
| March 8-11, 2011 | Pumping Systems Design for Civil Engineers | Hydraulics & Water Resources | San Francisco, CA |
| March 17-18, 2011 | Design Build Contracting | Construction/Development | Sacramento, CA |
| March 17-18, 2011 | Water Hammer in Transmission and Distribution Systems | Hydraulics & Water Resources | San Diego, CA |
| March 24-25, 2011 | Risk Assessment in Geotechnical Engineering | Geotechnical/Transportation | San Diego, CA |

Outstanding Projects and Leaders

by Philip J. Vulliet, PE, Project Engineer, Mark Thomas & Company, Inc., Sacramento, CA, and Thomas R. Barnard, PE, Vice President, AECOM Technology Corp., Sacramento, CA

This month's outstanding project: **Watt Avenue Light Rail Grade Separation Project, Sacramento County**



Aerial photo of structure during construction, just after erection.

The Watt Avenue LRT Grade Separation project addressed severe operational deficiencies at the Folsom Boulevard/Watt Avenue intersection. Historically the intersection of Watt Avenue and Folsom Boulevard operated poorly due to traffic volumes exceeding the capacity, the interaction with the Watt Avenue/US 50 interchange ramp weaving movements to the north, and the light rail crossing pre-empting signal phasing to the south. Under existing conditions, the intersection operated at LOS "F" during peak hours. Peak hour traffic delays, once started, did not clear for several hours. For several key roadway segments in the Watt Avenue corridor (i.e. the one mile segment from Keifer Boulevard to La Riviera Drive), peak hour travel times approached 10 minutes. The consequences of these poor operations were that travel demand was not satisfied, emergency vehicle access was delayed, and queues onto US 50 from the Watt Avenue interchange ramps created safety issues. The Watt Avenue LRT Grade Separation project elevated the light rail tracks in a structure crossing over Watt Avenue, while the heavy rail tracks remained at grade.

The construction area for the structure was very constrained; wedged between Folsom Boulevard, the very active light rail tracks, the UPRR freight and an operating multimodal Manlove Station. In addition, the proximity of the station to Watt Avenue, the maximum grade requirements of the rail as it approaches the station, and the minimum vehicular clearance on Watt Avenue constrained the design and construction efforts even further. The result of these site conditions and the extensive type selection process was an innovative structural design unlike anything implemented in the region to date.

This project provided the opportunity to utilize an innovative structure design for the first time on the West Coast. The grade separation structure has a "trough" cross-section, which consists of three precast/prestressed girders spanning in the longitudinal direction, and precast/prestressed concrete slabs spanning between adjacent girders



The precast concrete girders in the manufacturer's yard prior to site delivery and erection.

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Erection was a dual crane process requiring both cranes to work in concert to place the girders weighing as much as 263,000 lbs.

in the transverse direction. The precast girders varied in size with the largest measuring 3'x7'x115' long, weighing as much 263,000 lbs. Delivery and erection of the precast elements was a key component to success of the project. Special contract circumstances resulted in the girders being provided to the Contractor as owner supplied material, along with the delivery and erection. Such an arrangement required the ultimate in cooperation and coordination between the parties in order to facilitate the delivery and installation of the precast components of the grade separation structure. Following girder erection, the deck slab panels were installed and their transverse joints grouted. Their integration into the superstructure was made complete by post-tensioning the transverse tendons, which also pass through the girders and closure pours. Finally, the longitudinal tendons in the girders and slabs were stressed to produce the required composite system capacity.

This design concept reflects many of the typical flexibilities of precast concrete, commonly used to solve difficult site constraints or staging requirements; however, this bridge highlights an important benefit of precast concrete that is often overlooked - namely how the precast concrete components can be integrated into a "composite super girder" to economically meet a wider range of functional requirements.

The greatest challenge for the designers and the contractor was related to the multi-modal nature of the site. The design was the direct result of the site constraints; both the controlling clearances and grades and the need to maintain train and vehicular traffic while not interfering with the ongoing light rail vehicle and station operations. The difficulty of constructing a grade separation in close proximity to operating light rail and freight tracks cannot be overstated. Close coordination between the contractor and Sacramento Regional Transit operations was required to ensure construction activity did not encroach into the operating envelope without appropriate warrants in place. While the UPRR spur did not have significant traffic (3-4 trains a week) both Sacramento County DOT construction management and contractor personnel coordinated any encroachment into the freight rail right of way with railroads operations personnel.

A contributing factor to the complexity of the fabrication and erection of the structure was the number of precast elements to be incorporated. The tolerance for fabrication errors is reduced in direct proportion to the number of components involved. All components had to be fabricated, or more appropriately, manufactured, to ensure they matched up in the field; with each other and with the site cast foundation and substructure.

Both transverse and longitudinal joints had to line up in order to receive the post-tensioning tendons required to tie the composite structure together. Many of the issues experienced during construction were related to the girder fabrication, longer-than-usual

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storage periods, transportation, and erection scheme. Additional issues also surfaced during the erection of the slab panels, and the integration of all precast girder-slab components into a single “super-girder” section.



The Watt Ave./Folsom Blvd. Intersection after project completion.

This project was a very unique engagement for the Mark Thomas and Company/AECOM USA, Inc. Team. Project design activities required a high level of partnering both with the County of Sacramento and Sacramento Regional Transit. Additionally, project

design required cooperation between a diverse set of disciplines including structural, drainage, roadway, electrical, systems, and landscape design. Coordination of these disciplines and designs was one of the key project challenges to be addressed for a successful project delivery. The Mark Thomas and Company/AECOM USA, Inc. Team collaborated to produce a successful design and construction effort resulting in great benefit both for the traveling public, Sacramento Regional Transit, and the County.

The Watt Avenue LRT Grade Separation Project received the Sacramento Section's Transportation Project of the Year (2009) Award. - Ed.

A New Vision for Engineering

U.S. and New Zealand Organizations Agree to Work Collaboratively to Enhance the Future of the Engineering Profession

Reston, Va.—The Institution of Professional Engineers New Zealand (IPENZ) has formally endorsed The Vision for Civil Engineering in 2025—an American Society of Civil Engineers initiated vision for the future of the engineering profession. During the ceremony, held on August 2, 2010 at the Institution offices in Wellington, New Zealand, IPENZ President Garry Macdonald and ASCE president Blaine D. Leonard, P.E., D.GE, F.ASCE, signed the document on behalf of their organizations, which have now agreed to work together to achieve the Vision 2025.

“Engineers are entrusted with creating and maintaining the foundations on which our global society thrives, and as the needs of that society change, so too must the profession,” said Leonard. “Sharing a common vision and working together to achieve it is critical to our success, which is why I’m so pleased to have IPENZ’s endorsement.”

The Vision for Civil Engineering in 2025 redefines what it will mean to be a civil engineer in the world of the future. It represents the collective wisdom of more than 60 experts from around the world and presents a vision for what the future can and should be. It states that: “Entrusted by society to create a sustainable world and enhance the global quality of life, civil engineers serve competently, collaboratively, and ethically as master:

- planners, designers, constructors, and operators of society’s economic and social engine—the built environment;

- stewards of the natural environment and its resources;
- innovators and integrators of ideas and technology across the public, private, and academic sectors;
- managers of risk and uncertainty caused by natural events, accidents, and other threats; and
- leaders in discussions and decisions shaping public environmental and infrastructure policy.”

ASCE recently released a companion document to the Vision 2025 titled, *Achieving the Vision for Civil Engineering in 2025: A Roadmap for the Profession*. This new report outlines what the profession must do to achieve the goals outlined in the Vision 2025.

For more information on Vision 2025 and the Roadmap, please visit the “Issues and Advocacy” sect section on www.asce.org (or go directly to <http://www.asce.org/PPLContent.aspx?id=2147486194>).

The Institution of Professional Engineers New Zealand (IPENZ) represents 11,500 Members and is the lead national professional body representing the engineering profession in New Zealand. For more information, visit www.ipenz.org.nz.

Founded in 1852, the American Society of Civil Engineers (ASCE) represents more than 144,000 civil engineers worldwide and is America’s oldest national engineering society. For more information, visit www.asce.org.

For more information contact: ASCE – Leikny Johnson, 703-295-6413, ljohnson@asce.org.

EWRI 2011 Congress Call for Abstracts

The organizing committee of the World Environmental & Water Resources Congress 2011 welcomes abstract submissions for this year’s event, being held May 22-26, 2011, in Palm Springs, California. Submissions are due by the deadline of ~~September 7, 2010~~ **September 21, 2010**. In terms of requirements, abstracts must be in English, contain material not previously published or presented, include the title of the paper, a 250-500 word abstract of the paper or extended abstract and the author or a list of authors if appropriate. Please be certain to identify the expected presenter. For each author, please include their name, affiliation, mailing address, e-mail, and phone number. It should also be noted that the author who uploads the abstract is expected to be the same author that would ultimately submit the final paper.

A variety of tracks and sessions will be hosted at the 2011 Congress, and EWRI anticipates strong participation and a diverse sampling of technical content in the conference program.

Visit the [Congress website](#) for a list of sub-topics to supplement the above-listed subject matter. The website also provides additional information on housing, international attendees, tours, and opportunities to sponsor or exhibit in Palm Springs.

For questions, or more information about the 2011 World Environmental & Water Resources Congress, visit the website, contact the Congress Technical Chair at ewri2011tc@asce.org, or send inquiries to ewri@asce.org.

If you would like to exhibit or cosponsor the conference please contact Sean Scully at 703-295-6154 or sscully@asce.org or Kira Simonson or 703-295-6349 or ssimonson@asce.org.